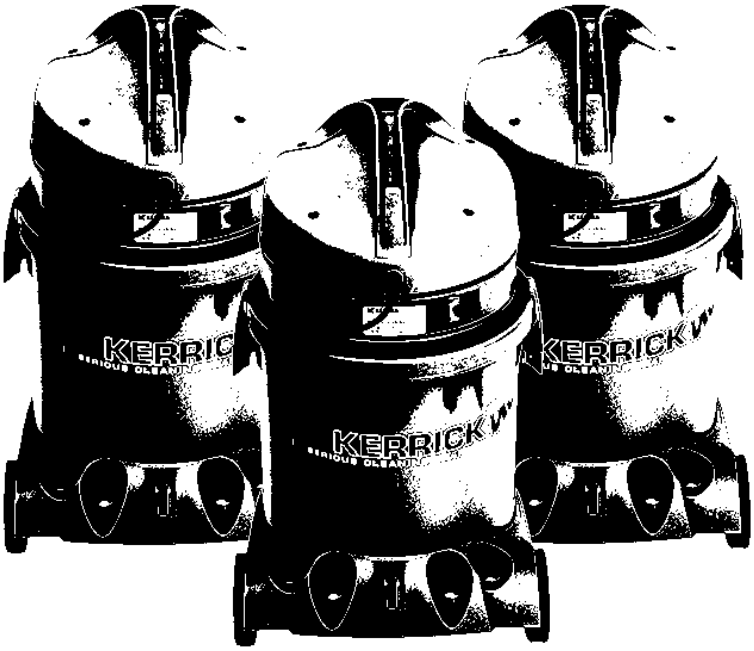
KERRICK®

OPERATING & MAINTENANCE MANUAL



ECOSPITAL VACUUM CLEANER

Read Safety & Operating Instructions Before Commencing Operation

THESE INSTRUCTIONS MUST BE READ AND ADHERED TO BEFORE OPERATING THIS MACHINE.

INTORDUCTION

Your new Kerrick Ecospital dry vacuum cleaner is certified for vacuuming “H” class dust according to regulation EN 60335-5-69PAR.AA6. It is also certified for use in the electro medical sector according to regulation IEC/EN 60601-1.

Your vacuum cleaner comes complete with a full range of accessories designed to make your cleaning task and easy one. Manufactured in Italy this is a high quality unit that if treated properly will give many years of service. To get the best from your Kerrick machine we suggest you follow the operating and maintenance details contained in this document.

The Ecospital is manufactured with plastic materials that inhibit bacterial and fungal growth and development. The filtration on the Ecospital is designed to trap and contain high hazard dusts (including carcinogenic and pathogenic dusts) thereby limiting the operators occupational exposure. This vacuum cleaner is ideal for use in hospitals, clean rooms and restricted areas that require high filtration. It’s also suitable for use in hostels, schools, aged care facilities, offices, factories shops, residences etc.

The manufacture declares that all machinery and parts are shipped only after electrical safety tests established by EN 50106.

NOISE LEVEL

Values measured according to EN 60704-1 (2010) / EN 60704-2-1 (2001) / ISO 3744 (2010) rules. Measurement A for the sound pressure level of the machine is 74.2 dB(A). Under unfavourable feed conditions, the appliance may cause temporary drops in voltage.

<table>
<tr><th colspan="3">Guidance and manufacturer's declaration</th></tr>
<tr><td colspan="3">The customer or the user of the ECOSPITAL should assure that used in such an environment.</td></tr>
<tr><td colspan="3">The model ECOSPITAL is intended for use in the electromagnetic environment specified below.</td></tr>
<tr><th>Emission test</th><th>Compliance</th><th>Electromagnetic environment - guidance</th></tr>
<tr><td>RF Emission CISPR 14-1</td><td>Compliance</td><td>The ECOSPITAL is not suitable for interconnection with other equipment.</td></tr>
<tr><td>Harmonic emission IEC61000-3-2</td><td>Class A</td><td rowspan="2">The ECOSPITAL is suitable for use in all establishment, including domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.</td></tr>
<tr><td>Voltage fluctuations / flicker emission IEC 61000-3-3</td><td>Compliance</td></tr>
<tr><td colspan="3">CAUTION: The ECOSPITAL should not be used adjacent to or stacked with other equipment, if you need to use it in the above mentioned conditions, check the normal operation in the configuration in use.</td></tr>
<tr><td colspan="3">CAUTION: The ECOSPITAL has not been tested for immunity to electromagnetic interference.</td></tr>
<tr><td colspan="3">CAUTION: The ECOSPITAL does not contain electronic circuits and consequently is not susceptible to electromagnetic interference.</td></tr>
</table>

WARNINGS:

- Kerrick cannot be held responsible for any damage/injury caused to persons or property, because of the incorrect use of the machine due to procedures being used which are not specified in this instruction manual.
- The operator of this vacuum must be authorized to use it and aware of the risks involved with vacuuming toxic substances.

SAFETY MANAGEMENT PROCEDURES

These Instructions must be read and adhered to before operating this machine. Failure to do so may result in injury to the operator, nearby persons, or damage to property, or this machine.

- The packaging around the cleaner (plastic bags, clips, ties etc) pose a choking hazard and should be kept out of the reach of children and animals.
- Before use the operator must be trained on how to use this device, the substances it will be used to vacuum and the correct and safe methods of removing and disposing of collected materials.
- **THIS MACHINE MAY CONTAIN DUSTS HAZARDOUS TO YOUR HEALTH**. Emptying of the tank, removing filters and maintenance work must be carried out by authorized personnel wearing suitable protective clothing.
- This machine is not designed to be used by children or mentally disabled individuals and if used incorrectly can be harmful.
- The end of the suction hose / accessories must be kept away from your face and the faces of others at all times during operation as the suction created can cause damage to the eyes, ears an mouth in particular.
- This appliance is double insulated and for **DRY USE ONLY.** Do not use the machine to suck up liquids of any kind.
- Do not operate this machine without the full filtration system fitted.
- Do not use adapters or multiple sockets, without knowing the electrical input of each user.
- If any electrical extension is used, check that it corresponds to the absorbed power of the machine and that the connection of the plug with the socket is compliant and sealed.
- Take care of the electrical cable. It must be protected from water, tears and chemical agents. Do not repair the cable in case of tears, but replace it with a new one. The cable must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid further hazard.
- **DO NOT** pull the cable to drag the machine into position or to remove the plug from socket.
- Pull the plug out only when the machine is switched off.
- **DO NOT** handle the plug with wet hands.
- Unplug cable before servicing machine.
- This machine is not suitable for areas protected against electrostatic discharges.
- Use only the accessories supplied with the appliance or those specified in the user manuals. Using other brushes could jeopardize safety.
- This vacuum cleaner should **NEVER** be immersed in water.
- **DO NOT** use solvent or strong detergents to clean this machine.
- Store the machine, well cleaned, in a cool and dry place.

UNPACKING AND SETTING UP

Assembly details and information on how to carryout various cleaning operations are outlined below. Read safety and operating instructions before commencing operation. This vacuum cleaner is double insulated and designed for **DRY USE ONLY**. Do not use the machine to suck up liquids of any kind. Before commencing use operators must ensure the filtration system is fitted correctly.

A - Vacuum head

B – Switch

B2 – Bag full pilot light

C – HEPA cartridge the filters air (exiting the machine)

E – HEPA filter cartridge (absolute filter)

T – Polycarbonate pre-filter, placed on filter cartridge

F – Hooks to secure vacuum motor head to tank

G – Suction inlet

S – Paper bag (attaches to deflector in the tank)

H – Tank

L – Flexible hose

M – Tube

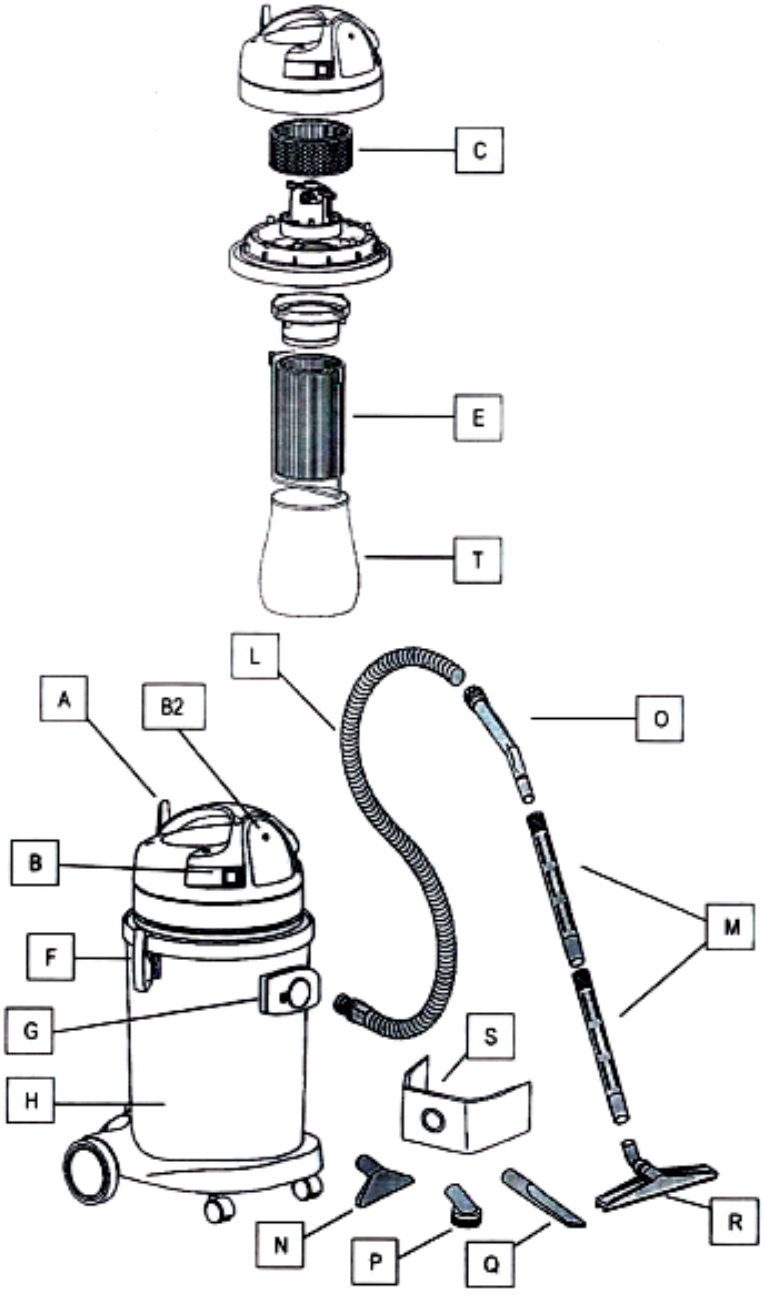
N – Small brush

O – Wand

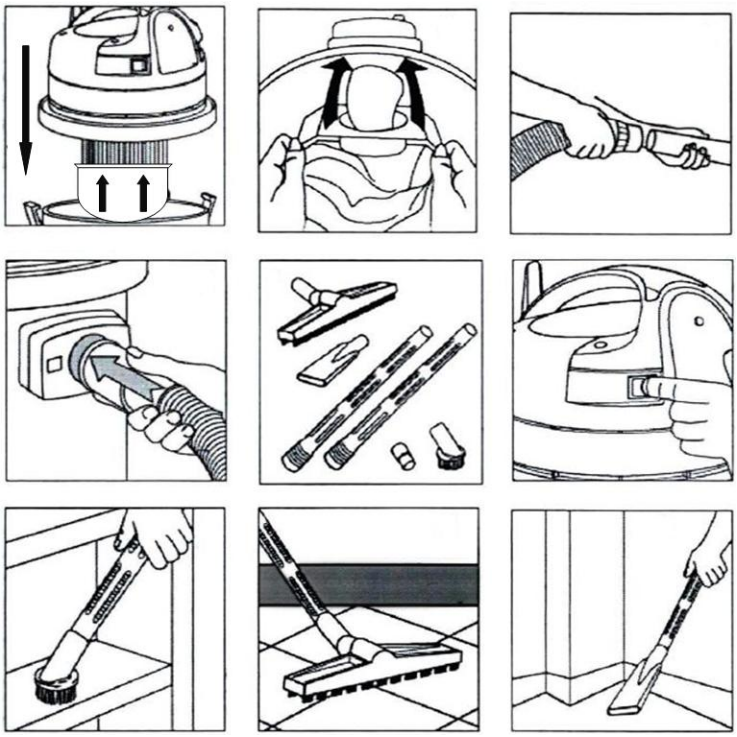
P – Round Brush

L – Flat Lance

R – Dust Tool



GENRAL ASSEMBLY



1) Lift the machine out of the box by gently angling the box and pulling the vacuum cleaner by its carry handle.
2) Unclip the two clips (F) on the side of the motor head (A) and lift the motor from the tank (H).
3) Ensure the HEPA filter (E) is locked into place and covered with the polycarbonate sack (T). See Filtration Assembly below for further details.
4) Ensure the paper bag filter (S) is fitted over the deflector inlet inside the tank (H).
5) Place the motor head (A) back on top of the tank and clip (F) it into place.
6) Insert the flexible vacuum hose (L) into the tank inlet (G) and press until you hear a click as it locks into place.
7) Screw the top wand (O) into the flexi hose (L).
8) Fit the two piece extension wands (M) together and connect to the top wand (O).
9) Select the most suitable accessory for the job (N, P, Q or R) and connect it to the extension wand (M).
10) Unwind the electrical cable and insert the plug into an appropriate power socket with the correct electrical output.
11) Your machine is now ready for use, turn it on using the switch (B) and vacuum as required.
12) Turn off using the same switch (B).

FILTRATION ASSEMBLY

Before commencing use operators must ensure the filtration system is fitted correctly.

1) The HEPA cartridge filter (H13, 0.3micron, filter surface 12000cm2) must be assembled and fitted and locked into place under the base of the motor head.
2) The filter sack, made from POLYCARBONATE must be fitted over the HEPA cartridge.
3) The paper filter bag must be fitted over the deflector inlet inside the tank.

CHANGING FILTERS AND COLLECTION BAGS

The Ecospital is equipped with a manostat with a control lead that lights up when the HEPA cartridge filter is clogged and must be replaced.

To order a replacement HEPA filter use the reference code:
REF.07768 – HEPA CARTRIDGE – Filter surface: 12000cm^2.

This is a Hazard grade filter **DO NOT** clean it with compressed air. The absolute filter must be disposed of after use to maintain the integrity of the filter system and prevent unwanted hazardous dusts entering the environment.

We suggest that when replacing collection bags or filters that instruments for personal protection be used such as gloves, protective mask for nose and mouth, safety glasses and full disposable overalls to prevent contaminated dust from making contact with other parts of the operator's body.

It is recommended to wait a few minutes (after turning off the vacuum cleaner) before removing the absolute filter so that any contaminated dusts can settle inside the tank before it's opened. It is advised to immediately place the dirty absolute filter straight into the appropriate disposal container. The dirty absolute filter is toxic waste and must be treated as such. For the disposal thereof please adopt the procedures recommend by the relevant national laws.

The advice above outlines the minimum safety requirements to be adopted. Please take note of legal health and safety regulations in your area.

MAINTENANCE

To guarantee a safe and sustained functioning of the machine, carry out routine maintenance on a regular basis, checking the integrity of the plastic parts, the filtration efficiency and correct operating of the main control system.

Regularly check the power cable for damage. If any damage is found then have a trained technician replace the cable before use.

Specialist personnel only may carry out repairs and maintenance; any damaged part must be substituted with original spare parts.

If the machine is used properly and the maintenance is done constantly, the engine has a life of 800 hours (as specified by the manufacturer), after which the vacuum cleaner will likely stop working. At this point you can replace worn brushes with an original new set of brushes.

When you change the motor brushed you must also replace the inner HEPA filter (C).

Before sending the vacuum to technical assistance, it must be cleaned outside and inside the tank, removing the filtering system if contaminated, in order to prevent risks for the maintenance repair personnel.

Before any operation prepare all the appropriate measures to protect the operator's safety. All parts of the device must be deemed to be contaminated when they are removed from the area of use and appropriate action must be taken to prevent the dispersal of dust.

When maintenance or repair operations are carried out, all contaminated elements which cannot be cleaned well must disposed of. These parts must be disposed of in impenetrable bags conforming to the regulations applicable for the elimination of such materials.

TROUBLE SHOOTING

Dry Vacuum Cleaners		
Trouble	**Possible Cause**	**Remedy**
Insufficient vacuum	Filter clogged and blocking airflow	Clean filter and empty tank.
	Faulty motor	Return to Kerrick or Kerrick Service agent and have motor replaced.
	Hose or tooling are cracked and disrupting suction	Repair and replace as required
Vacuum overheats	Filter clogged and blocking airflow	Clean filter and empty tank.
	Faulty motor	Return to Kerrick or Kerrick Service agent and have motor replaced.

CE	The CE mark "European Compliance" means that the product ECOSPITAL is in accordance with the essential requirements provided by the law, concerning safety and public health measures, protection of the consumer , etc.
	Means that the product ECOSPITAL is suitable to be used in the medical sector.
	WARNING: These symbols will be used to remind the operator to pay attention to operations that may cause lesions, including death, to the operator or to other people or animals nearby. Furthermore, the operations indicated by these symbols may cause damages, even irreparable ones, to the suction device.
	ATTENTION: Please read carefully the instruction manual before using. it is recommended to keep this manual for future references.
	DOUBLE INSULATION: Vacuum ECOSPITAL is a machine with "double insulation or class II", where the safety device that prevent electrocution is not a standard insulating device, but a double insulating device, with additional safety measures.
	WARNING: ONLY FOR INDOOR APPLICATION
	Do not dispose of power tools into household waste! According to the European Directive 2010/19/EU on waste electrical and electronic equipment (WEEE) and its incorporation into national law, power tools that are no longer suitable for use must be separately collected and sent for recovery in an environmental- friendly manner.
	FRAGILE
	UP This symbol shows the correct position that the package must keep during the transport and the storage.
	Keep dry.
	Maximum number of objects that can be piled up (4).
	Recommended **operating temperature** range **from +10°C to +40°C** / during the **transport** and **storage** **from -40°C to +70°C**
	Recommended **operating humidity** range **from 30% to 75%** / during the **transport** and **storage** **from 10% to 90%**
	Recommended operating atmospheric pressure range **from 70kPa to 106kPa** / during the **transport** and **storage** **from 50kPa to 106kPa**

Test Report issued under the responsibility of:

DEKRA

IEC 60601-1
Medical electrical equipment
Part 1: General requirements for basic safety and essential performance

Report Reference No.....:	3503094.50
Date of issue.....:	April 19, 2013
Total number of pages .....:	151
Testing Laboratory.....:	DEKRA Testing and Certification Srl
Address .....:	Via Martiri della Liberazione, 12 23875 Osnago (LC), Italy
Applicant's name.....:	SOTECO S.p.A.
Address .....:	Via SE. Fermi, 2 26022 Casterlverde (CR), Italy
Test specification:	
Standard .....:	IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007)
Test procedure .....:	CE marking procedure
Non-standard test method……...:	N/A
Test Report Form No.....:	IEC60601_1G
Test Report Form Originator .....:	Underwriters Laboratories Inc.
Master TRF.....:	Dated 2011-11

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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

Test item description .....:	Dry vacuum cleaner
Trade Mark .....:	SOTECO
Manufacturer .....:	SOTECO S.p.A. Via E. Fermi 2, 26022 Casterlverde (CR), Italy
Model/Type reference.....:	ECOSPITAL and ECOSPITAL STEEL
Ratings .....:	220-240 Vac, 50-60 Hz, 1100 W, 1300 W max, Class II.

Testing procedure and testing location:
☒ **Testing Laboratory:** Testing location/ address .....: DEKRA Testing and Certification Srl Via Martiri della Liberazione, 12 23875 Osnago (LC), Italy ☐ **Associated CB Test Laboratory:** Testing location/ address : Tested by (name + signature).....: Davide Atzeni Approved by (+ signature) .....: Alessandro Corti
☐ **Testing procedure: TMP** Tested by (name + signature).....: Approved by (+ signature) ..... : Testing location/ address .....:
☐ **Testing procedure: WMT** Tested by (name + signature).....: Witnessed by (+ signature) ..... : Approved by (+ signature) .....: Testing location/ address .....:
☐ **Testing procedure: SMT** Tested by (name + signature).....: Approved by (+ signature) .....: Supervised by (+ signature).....: Testing location/ address ..... :
☐ **Testing procedure: RMT** Tested by (name + signature).....: Approved by (+ signature) .....: Supervised by (+ signature).....: Testing location/ address ..... :

SERVICING

Kerrick's workshop facilities are staffed by experienced technicians providing servicing, repair and manufacturing for a range of products including; vacuum cleaners, extractors, water blasters, pressure cleaners, pumps and more.

We work on everything from commercial and light industrial to large heavy duty equipment and offer customized design build services. We also warehouse and ship a comprehensive range of spare parts for your convenience.

For more information on your product, to book in a service or repair or to order spare parts give Kerrick a call or send through and enquiry on our website. Contact details can be seen below:

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